

AMENDMENTS TO THE SPECIFICATION:

Please replace the 1st full paragraph on page 2 with the following amended paragraph. Specifically, p. 2, l. 14 is amended to read "is oscillated".

Some of the more common Q-switching methods employed in practical laser system are shown in figures 2a through 2c. The laser cavity includes a gain medium 22 and a pair of mirrors 24 and 26. As shown in figure 2a, mirror 26 is rotated (spinning motor shaft) so that the laser is oscillated only during the brief interval when mirror 26 is aligned with mirror 24. As shown in figure 2b, an electrooptic crystal 28 which becomes birefringent under the influence of applied voltage and one or more prisms 30 are placed inside the cavity. The birefringent crystal 28 rotates the polarization of the light energy so that it is coupled out of the cavity by the prism 30. Electrooptic Q-switching provides fast switching with precise timing and good stability but the repeat rate is relatively slow and the crystal and pulse source are fairly expensive, as the voltage needed to switch one polarization to the other is more than a few hundred volts. As shown in figure 3c, an rf acoustic wave created in the optical material 32 at the Bragg condition diffracts light out of the cavity to lower the Q. Acoustic modulators have a fast repeat rate but are expensive and a slower switch speed as well as limited aperture size.